

UNITED STATES PATENT AND TRADEMARK OFFICE

TATES DEPARTMENT OF COMMERCE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS P.O. Ess. 1450 Alexandria, Virginia 22313-1450

NOTICE OF ALLOWANCE AND FEE(S) DUE

25944

7590

05/15/2003

OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320 EXAMINER

VO, ANH T N

ART UNIT

CLASS-SUBCLASS

2861

347-045000

DATE MAILED: 05/15/2003

ſ	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
ì	09/889,097	07/11/2001	Hitoshi Fukushima		7922

TITLE OF INVENTION: INK JET PRINTER HEAD MANUFACTURING METHOD THEREOF, AND POLYCYCLIC THIOL COMPOUNDS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1300	\$0	\$1300	08/15/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.
- Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE
Commissioner for Patents
Alexandria, Virginia 22313-1450
Fax (703)746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where

appropriate. All further co- indicated unless corrected maintenance fee notification	below or directed otherw	ne Patent, advance orders ise in Block 1, by (a) sp	and notification ecifying a new co	of maintenance fe orrespondence add	ress will be mailed to the current ress; and/or (b) indicating a sep-	correspondence address a arate "FEE ADDRESS" for	
CURRENT CORRESPONDEN	CE ADDRESS (Note: Legibly mar 590 05/15/2003		Block 1)	Fee(s) Transmi	ate of mailing can only be used for ttal. This certificate cannot papers. Each additional paper, s must have its own certificate of n	be used for any other such as an assignment or	
P.O. BOX 19928 ALEXANDRIA, V			Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above, or being facsimile transmitted to the USPTO, on the date indicated below.				
						(Depositor's name)	
						(Signature)	
						(Date)	
. APPLICATION NO.	APPLICATION NO. FILING DATE			FIRST NAMED INVENTOR ATTORNEY DOCKET			
09/889,097 TITLE OF INVENTION: II	07/11/2001 NK JET PRINTER HEAD		Hitoshi Fukushim (ETHOD THERE)		YCLIC THIOL COMPOUNDS	7922	
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APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBL	CATION FEE	TOTAL FEE(S) DUE	DATE DUE	
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1. Change of corresponder CFR 1.363).		ne e	2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a				
☐ Change of correspond Address form PTO/SB/1	ence address (or Change o 22) attached.	f Correspondence	single firm (ha	ving as a memb	er a registered		
☐ "Fee Address" indicate PTO/SB/47; Rev 03-02 Number is required.	ion (or "Fee Address" Indi or more recent) attached. V	cation form Use of a Customer	registered paten	nt) and the nam t attorneys or age e will be printed.			
3. ASSIGNEE NAME AND	RESIDENCE DATA TO	BE PRINTED ON THE	PATENT (print o	r type)			
PLEASE NOTE: Unless a been previously submitted (A) NAME OF ASSIGNE	to the USPTO or is being	submitted under separate	ill appear on the percent cover. Completion (CITY)	n of this form is N	f assignee data is only appropriat OT a substitute for filing an assig COUNTRY)	e when an assignment has inment.	
Please check the appropriate	e assignee category or cate	gories (will not be printe	d on the patent)	☐ individual	☐ corporation or other private gr	roup entity 🚨 government	
4a. The following fee(s) are	enclosed:	4b. Pay	ment of Fee(s):				
☐ Issue Fee			neck in the amount	` '			
□ Publication Fee		•	nent by credit care Commissioner is l		s is attached. by charge the required fee(s), or o	credit any overnavment, to	
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(Authorized Signature)		(Date)					
NOTE; The Issue Fee an other than the applicant; interest as shown by the re	d Publication Fee (if requ a registered attorney or cords of the United States	uired) will not be accept agent; or the assignee of Patent and Trademark O	ed from anyone or other party in ffice.				
This collection of information obtain or retain a benefit application. Confidentialit estimated to take 12 minus completed application for	ation is required by 37 Cl by the public which is to y is governed by 35 U.S.C tes to complete, including m to the USPTO. Time	FR 1.311. The information file (and by the USPTC 122 and 37 CFR 1.14. It gathering, preparing, an will vary depending upo	on is required to to process) an This collection is d submitting the n the individual				
estimated to take 12 minu completed application for case. Any comments on suggestions for reducing to Patent and Trademark 22313-1450. DO NOT S SEND TO: Commissioner	ioi ratents, Alexandria, v	rigina 22313-1430.					
Under the Paperwork Re collection of information u	eduction Act of 1995, no unless it displays a valid O	o persons are required t MB control number.	to respond to a				



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS P.O. Box 1459 Alexandria, Vugnia 22313-1450 www.usplo.gev

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO. CONFIRMATION I	
09/889,097	07/11/2001	Hitoshi Fukushima	7922	
25944	7590 05/15/2003		EXAMINI	ER
OLIFF & BERRIDGE, PLC		VO, ANH T N		
P.O. BOX 19928 ALEXANDRIA,			ART UNIT	PAPER NUMBER
•			2861	
			DATE MAII ED: 05/15/2003	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The patent term adjustment to date is 113 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 113 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.



United States Patent and Trademark Office

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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/889,097		07/11/2001	Hitoshi Fukushima	7922	
25944 7590 05/15/2003		05/15/2003		EXAMINER	
OLIFF & BER	RIDGE,			VO, ANH	TN
P.O. BOX 1992 ALEXANDRIA		20	[ART UNIT	PAPER NUMBER
UNITED STATES			2861		
			Ţ	ATE MAII ED. 05/15/2002	

Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: http://www.uspto.gov/main/howtofees.htm.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

Notice of Allowability

Application No. **09/889,097**

Applicant(s)

HITOSHI FULUSHIMA ET AL.

Examiner

Anh T. N. Vo

Art Unit 2861



The mailing date of this communication appears on the cover sheet with the correspondence address
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.
1. X This communication is responsive to Preliminary Amendment filed on 04/02/2003
2. X The allowed claim(s) is/are 1-13
3. X The drawings filed on are accepted by the Examiner.
4. X Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
a) 🛛 All b) 🗆 Some* c) 🗀 None of the:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No.
3. X Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). *Certified copies not received:
5. Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
(a) The translation of the foreign language provisional application has been received.
6. Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.
Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.
7. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. CORRECTED DRAWINGS must be submitted.
(a) \square including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) 🗌 hereto or 2) 🗍 to Paper No
(b) \square including changes required by the proposed drawing correction filed, which has been approved by the examiner.
(c) including changes required by the attached Examiner's Amendment/Comment or in the Office action of Paper No
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the top margin (not the back) of each sheet. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.
DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.
Attachment(s)
Notice of References Cited (PTO-892) 2 Notice of Informal Patent Application (PTO-152)
Notice of Draftsperson's Patent Drawing Review (PTO-948) 4 Interview Summary (PTO-413), Paper No
Information Disclosure Statement(s) (PTO-1449), Paper No(s) 6 Examiner's Amendment/Comment
Examiner's Comment Regarding Requirement for Deposit of Biological 8 X Examiner's Statement of Reasons for Allowance Material
Other •

Serial Number: 09/889,097 Page 2

Art Unit: 2861

Continued Prosecution Application

Receipt is acknowledged of the "conditional" request for a Continued Prosecution Application (CPA) filed on April 02, 2003 under 37 CFR 1.53(d) based on prior Application No. 09/889,097. Any "conditional" request for a CPA submitted as a separate paper is treated as an unconditional request for a CPA. Accordingly, the request for a CPA application is acceptable and a CPA has been established. An action on the CPA follows.

Reasons For Allowance

The following is an Examiner's Statement of Reasons for Allowance:

Claims 1-13 are allowed because none of the prior art references of record teaches an ink jet head comprising a self-organized film layer which consists of a polycyclic thiol compound formed on a top of the metal layer in the combination as claimed.

CONCLUSION

Any comments considered necessarily by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Anh Vo whose telephone number is (703) 305-8194. The examiner can normally be reached on Tuesday to Friday from 7:30 A.M.to 5:30 P.M..

The fax number of this Group 2800 is (703) 305-3431 or 305-3432.

Art Unit: 2861

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

ANHT.N.VO PRIMARY EXAMINER

May 10, 2003